NEWS RELEASE
BUREAU OF LABOR STATISTICS
U. S. DEPARTMENT OF LABOR

For Release: Monday, June 18, 2018 **18-1032-DAL**

SOUTHWEST INFORMATION OFFICE: Dallas, Texas
Technical information: (972) 850-4800 BLSInfoDallas@bls.gov www.bls.gov/regions/southwest
Media contact: (972) 850-4800

Occupational Employment and Wages in Tulsa – May 2017

Workers in the Tulsa Metropolitan Statistical Area had an average (mean) hourly wage of $21.76 in May 2017, about 11 percent below the nationwide average of $24.34, according to the U.S. Bureau of Labor Statistics. Assistant Commissioner for Regional Operations Stanley W. Suchman noted that, after testing for statistical significance, wages in the local area were higher than their respective national averages in 1 of the 22 major occupational groups: production. Eighteen groups had significantly lower wages than their respective national averages, including computer and mathematical; education, training, and library; and management.

When compared to the nationwide distribution, local employment was more highly concentrated in 8 of the 22 occupational groups, including production; installation, maintenance, and repair; and sales and related. Conversely, 10 groups had employment shares significantly below their national representation, including personal care and service; education, training, and library; and computer and mathematical. (See table A and box note at end of release.)

Table A. Occupational employment and wages by major occupational group, United States and the Tulsa Metropolitan Statistical Area, and measures of statistical significance, May 2017

Major occupational group	Percent of total employment		Mean hourly wage		
	United States	Tulsa	United States	Tulsa	Percent difference (1)
Total, all occupations	100.0	100.0	$24.34	$21.76*	-11
Management	5.1	5.6*	57.65	50.39*	-13
Business and financial operations	5.2	4.4*	36.70	32.46*	-12
Computer and mathematical	3.0	2.0*	43.18	34.41*	-20
Architecture and engineering	1.8	1.9*	41.44	39.31*	-5
Life, physical, and social science	0.8	0.4*	35.76	36.20	1
Community and social service	1.5	1.2*	23.10	20.38*	-12
Legal	0.8	0.7	51.62	49.18	-5
Education, training, and library	6.1	4.9*	26.67	18.83*	-29
Arts, design, entertainment, sports, and media	1.4	1.0*	28.34	21.60*	-24
Healthcare practitioners and technical	6.0	6.0	38.83	36.13*	-7
Healthcare support	2.9	3.3*	15.05	13.97*	-7
Protective service	2.4	1.9*	22.69	20.20*	-11
Food preparation and serving related	9.3	9.4	11.88	10.03*	-16
Building and grounds cleaning and maintenance	3.1	2.4*	13.91	12.01*	-14
Personal care and service	3.6	2.3*	13.11	11.39*	-13
Sales and related	10.2	11.1*	19.56	18.21*	-7
Office and administrative support	15.4	16.2*	18.24	17.26*	-5
Farming, fishing, and forestry	0.3	0.1*	13.87	12.68	-9
Construction and extraction	4.0	4.6*	24.01	20.95*	-13
Installation, maintenance, and repair	3.9	4.8*	23.02	21.68*	-6
Production	6.3	8.7*	18.30	19.28*	5

Note: See footnotes at end of table.

Table A. Occupational employment and wages by major occupational group, United States and the Tulsa Metropolitan Statistical Area, and measures of statistical significance, May 2017 - Continued

Major occupational group	Percent of total employment		Mean hourly wage		
	United States	Tulsa	United States	Tulsa	Percent difference (1)
Transportation and material moving	7.0	7.0	17.82	16.65*	-7

Footnotes:
(1) A positive percent difference measures how much the mean wage in the Tulsa Metropolitan Statistical Area is above the national mean wage, while a negative difference reflects a lower wage.
* The percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90-percent confidence level.

One occupational group—installation, maintenance, and repair—was chosen to illustrate the diversity of data available for any of the 22 major occupational categories. Tulsa had 20,490 jobs in installation, maintenance, and repair, accounting for 4.8 percent of local area employment, significantly higher than the 3.9-percent share nationally. The average hourly wage for this occupational group locally was $21.68, significantly below the national wage of $23.02.

Some of the larger detailed occupations within the installation, maintenance, and repair group included maintenance and repair workers, general (4,160), automotive service technicians and mechanics (1,980), and first-line supervisors of mechanics, installers, and repairers (1,890). Among the higher paying jobs were avionics technicians and first-line supervisors of mechanics, installers, and repairers, with mean hourly wages of $34.76 and $30.80, respectively. At the lower end of the wage scale were tire repairers and changers ($10.89) and helpers--installation, maintenance, and repair workers ($14.17). (Detailed occupational data for installation, maintenance, and repair are presented in table 1; for a complete listing of detailed occupations available go to www.bls.gov/oes/current/oes_46140.htm .)

Location quotients allow us to explore the occupational make-up of a metropolitan area by comparing the composition of jobs in an area relative to the national average. (See table 1.) For example, a location quotient of 2.0 indicates that an occupation accounts for twice the share of employment in the area than it does nationally. In the Tulsa Metropolitan Statistical Area, above-average concentrations of employment were found in many of the occupations within the installation, maintenance, and repair group. For instance, maintenance workers, machinery, were employed at 4.0 times the national rate in Tulsa, and aircraft mechanics and service technicians, at 3.5 times the U.S. average. Tulsa's location quotient for maintenance workers, machinery, was among the highest in all metropolitan areas for this occupation. On the other hand, maintenance and repair workers, general, had a location quotient of 1.0 in Tulsa, indicating that this particular occupation’s local and national employment shares were similar.

These statistics are from the Occupational Employment Statistics (OES) survey, a federal-state cooperative program between BLS and State Workforce Agencies, in this case, the Oklahoma Employment Security Commission.

Notes on Occupational Employment Statistics Data

With the release of the May 2017 estimates, the OES program has replaced 21 detailed occupations found in the 2010 Standard Occupational Classification (SOC) with 10 new aggregations of those occupations. In addition, selected 4- and 5-digit North American Industry Classification System (NAICS) industries previously published by OES will no longer be published separately. Some of the 4-digit NAICS industries that are no longer being published separately will instead be published as OES-specific industry aggregations. More information about the new occupational and industry aggregations is available at www.bls.gov/oes/changes_2017.htm.

A value that is statistically different from another does not necessarily mean that the difference has economic or practical significance. Statistical significance is concerned with the ability to make confident statements about a universe based on a sample. It is entirely possible that a large difference between two values is not significantly different statistically, while a small difference is, since both the size and heterogeneity of the sample affect the relative error of the data being tested.

Technical Note

The Occupational Employment Statistics (OES) survey is a semiannual mail survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. The OES data available from BLS include cross-industry occupational employment and wage estimates for the nation; over 650 areas, including states and the District of Columbia, metropolitan statistical areas (MSAs), metropolitan divisions, nonmetropolitan areas, and territories; national industry-specific estimates at the NAICS sector, 3-, 4-, and selected 5- and 6-digit industry levels, and national estimates by ownership across all industries and for schools and hospitals. OES data are available at www.bls.gov/oes/tables.htm.

OES estimates are constructed from a sample of about 1.2 million establishments. Each year, two semiannual panels of approximately 200,000 sampled establishments are contacted, one panel in May and the other in November. Responses are obtained by mail, Internet or other electronic means, email, telephone, or personal visit. The May 2017 estimates are based on responses from six semiannual panels collected over a 3-year period: May 2017, November 2016, May 2016, November 2015, May 2015, and November 2014. The overall national response rate for the six panels, based on the 50 states and the District of Columbia, is 72 percent based on establishments and 68 percent based on weighted sampled employment. The unweighted sample employment of 82 million across all six semiannual panels represents approximately 58 percent of total national employment. The sample in the Tulsa Metropolitan Statistical Area included 3,500 establishments with a response rate of 77 percent. For more information about OES concepts and methodology, go to www.bls.gov/oes/current/oes_tec.htm.

The May 2017 OES estimates are based on the 2010 Standard Occupational Classification (SOC) system and the 2012 North American Industry Classification System (NAICS). Information about the 2010 SOC is available on the BLS website at www.bls.gov/soc and information about the 2012 NAICS is available at www.bls.gov/bls/naics.htm.

Metropolitan area definitions

The substate area data published in this release reflect the standards and definitions established by the U.S. Office of Management and Budget.

The **Tulsa Metropolitan Statistical Area** includes Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa, and Wagoner Counties in Oklahoma.

Additional information

OES data are available on our regional web page at www.bls.gov/regions/southwest. Answers to frequently asked questions about the OES data are available at www.bls.gov/oes/oes_ques.htm. Detailed technical information about the OES survey is available in our Survey Methods and Reliability Statement on the BLS website at www.bls.gov/oes/current/methods_statement.pdf.

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Relay Service: (800) 877-8339.

Table 1. Employment and wage data from the Occupational Employment Statistics survey, by occupation, Tulsa Metropolitan Statistical Area, May 2017

Occupation [1]	Employment		Mean wages	
	Level [2]	Location quotient [3]	Hourly	Annual [4]
Installation, maintenance, and repair occupations	20,490	1.2	$21.68	$45,100
First-line supervisors of mechanics, installers, and repairers	1,890	1.4	30.80	64,070
Computer, automated teller, and office machine repairers	340	1.1	15.68	32,620
Radio, cellular, and tower equipment installers and repairers	30	0.7	20.88	43,430
Telecommunications equipment installers and repairers, except line installers	920	1.3	24.00	49,930
Avionics technicians	220	3.9	34.76	72,300
Electric motor, power tool, and related repairers	90	1.7	19.94	41,480
Electrical and electronics repairers, commercial and industrial equipment	250	1.3	29.34	61,020
Electronic home entertainment equipment installers and repairers	130	1.7	17.62	36,640
Security and fire alarm systems installers	430	2.1	19.81	41,210
Aircraft mechanics and service technicians	1,380	3.5	30.17	62,750
Automotive body and related repairers	520	1.2	19.01	39,540
Automotive service technicians and mechanics	1,980	1.0	18.53	38,540
Bus and truck mechanics and diesel engine specialists	600	0.8	22.17	46,100
Mobile heavy equipment mechanics, except engines	370	0.9	22.87	47,570
Outdoor power equipment and other small engine mechanics	(5)	(5)	19.57	40,700
Recreational vehicle service technicians	120	2.6	17.65	36,720
Tire repairers and changers	360	1.1	10.89	22,650
Mechanical door repairers	180	2.8	14.99	31,170
Control and valve installers and repairers, except mechanical door	210	1.4	29.23	60,790
Heating, air conditioning, and refrigeration mechanics and installers	1,030	1.1	20.57	42,790
Home appliance repairers	170	1.8	18.13	37,710
Industrial machinery mechanics	850	0.8	24.31	50,570
Maintenance workers, machinery	1,010	4.0	21.74	45,230
Millwrights	(5)	(5)	23.08	48,010
Electrical power-line installers and repairers	630	1.8	25.20	52,420
Telecommunications line installers and repairers	(5)	(5)	23.50	48,890
Medical equipment repairers	210	1.6	24.04	50,000
Maintenance and repair workers, general	4,160	1.0	17.43	36,250
Coin, vending, and amusement machine servicers and repairers	190	1.9	14.93	31,050
Riggers	(5)	(5)	17.86	37,140
Helpers-installation, maintenance, and repair workers	320	0.9	14.17	29,480
Installation, maintenance, and repair workers, all other	590	1.3	17.63	36,670

Footnotes:
(1) For a complete listing of all detailed occupations in the Tulsa Metropolitan Statistical Area see www.bls.gov/oes/current/oes_46140.htm
(2) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.
(3) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.
(4) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly mean wage published, the annual wage has been directly calculated from the reported survey data.
(5) Estimate not released.